

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions and listings of claims in the application:

LISTING OF CLAIMS:

1. (CANCELLED)

2. (PREVIOUSLY PRESENTED) A method according to claim 21, wherein said de-activation includes performing said algorithm with a relatively higher repetition period.

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3. (PREVIOUSLY PRESENTED) A method according to claim 21, wherein said de-activation includes performing a different algorithm instead.

4. (ORIGINAL) A method according to claim 3, wherein said algorithm and said other algorithm are chosen in a group comprising closed-loop power control algorithms and open-loop power control algorithms.

5. (PREVIOUSLY PRESENTED) A method according to claim 21, comprising:

- regularly estimating if a criterion is met as to whether said power control algorithm should better be de-activated, when activated, or activated, when de-activated,
- de-activating, or activating, said power control algorithm if the corresponding criterion is met.

6. (PREVIOUSLY PRESENTED) A method according to claim 21, wherein provision is made not to de-activate, or activate, said algorithm too frequently.

7. (PREVIOUSLY PRESENTED) A method according to claim 21, wherein said estimation as to whether said criterion is met is based on an estimation of a deviation value, representative of a deviation between an estimated transmission quality and a target transmission quality.

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8. (PREVIOUSLY PRESENTED) A method according to claim 7, wherein said estimation as to whether said criterion is met includes:

- an estimation of a first deviation value, which would have been obtained if said power control algorithm had always been activated, on a given time-interval on which said deviation value is estimated,

- an estimation of a second deviation value, which would have been obtained if said power control algorithm had never been activated, on said given time-interval on which said deviation value is estimated,

- a choice between activation and de-activation of said algorithm depending on which of said first and second deviation values is the lowest.

9. (PREVIOUSLY PRESENTED) A method according to claim 7, wherein said estimated transmission quality is represented by an estimated signal-to-interference ratio.

10. (PREVIOUSLY PRESENTED) A method according to claim 7, wherein said estimated transmission quality is represented by a received signal power.

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11. (PREVIOUSLY PRESENTED) A method according to claim 7, wherein said estimated deviation value is represented by the variance of said estimated transmission quality.

12. (PREVIOUSLY PRESENTED) A method according to claim 21, wherein said method is performed in the uplink transmission direction of said mobile radiocommunication system.

13. (PREVIOUSLY PRESENTED) A method according to claim 21, wherein said method is performed in the downlink transmission direction of said mobile radiocommunication system.

14. (PREVIOUSLY PRESENTED) A method according to claim 21, wherein said mobile radiocommunication system is of CDMA type.

15. (PREVIOUSLY PRESENTED) A mobile radiocommunication network entity, comprising, for performing a method according to claim 21, in the uplink transmission direction of a mobile radiocommunication system:

- means for performing said method,
- means for sending corresponding power control commands to a mobile station.

Σ 1 16. (PREVIOUSLY PRESENTED) A mobile station, comprising, for performing a method according claim 21, in the uplink transmission direction of a mobile radiocommunication system:

- means for receiving power control commands from a mobile radiocommunication network entity, according to said method.

17. (PREVIOUSLY PRESENTED) A mobile station, comprising, for performing a method according to claim 21, in the downlink transmission direction of a mobile radiocommunication system:

- means for performing said method,
- means for sending corresponding power control commands to a mobile radiocommunication network entity.

18. (PREVIOUSLY PRESENTED) A mobile radiocommunication network entity, comprising, for performing a method according to claim 21, in the downlink transmission direction of a mobile radiocommunication system:

- means for receiving power control commands from a mobile station, according to said method.

19. (CANCELLED)

20. (CANCELLED)

21. (PREVIOUSLY PRESENTED) A method for improving performances of a mobile radiocommunication system using a power control algorithm, said method comprising:

regularly estimating if a criterion is met as to whether said power control algorithm should better be de-activated; and

de-activating said power control algorithm if said criterion is met,

wherein said estimating step includes:

an estimation of performance of said system with said power control algorithm activated;

an estimation of performance of said system with said power control algorithm de-activated; and

making a choice between activating and de-activating said algorithm
based on said estimating step.

22. (CANCELLED)

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24. (CANCELLED)

25. (PREVIOUSLY PRESENTED) A method for improving performances of a mobile
radiocommunication system using a power control algorithm, said method comprising:

regularly estimating if a criterion is met as to whether said power control
algorithm should better be de-activated; and

de-activating said power control algorithm if said criterion is met,
wherein said estimating step includes:

an estimation of performance of said system with said power control algorithm
de-activated; and

making a choice between activating and de-activating said algorithm based on
said estimating step.

26. (PREVIOUSLY PRESENTED) A method for improving performances of a mobile radiocommunication system using a power control algorithm, said method comprising:

regularly estimating if a criterion is met as to whether said power control algorithm should better be de-activated,

de-activating said power control algorithm if said criterion is met,

wherein said estimation as to whether said criterion is met is based on an estimation of a deviation value, representative of a deviation between an estimated transmission quality and a target transmission quality, and

wherein said estimation as to whether said criterion is met includes:

an estimation of a first deviation value, which would have been obtained if said power control algorithm had always been activated, on a given time-interval on which said deviation value is estimated,

an estimation of a second deviation value, which would have been obtained if said power control algorithm had never been activated, on said given time-interval on which said deviation value is estimated,

a choice between activation and de-activation of said algorithm depending on which of said first and second deviation values is the lowest.

27. (PREVIOUSLY PRESENTED) A method for improving performances of a mobile radiocommunication system using a power control algorithm, said method comprising:

regularly estimating if a criterion is met as to whether said power control algorithm should better be de-activated,
de-activating said power control algorithm if said criterion is met,
wherein said estimation as to whether said criterion is met is based on an estimation of a deviation value, representative of a deviation between an estimated transmission quality and a target transmission quality, and
wherein said estimated deviation value is represented by the variance of said estimated transmission quality.

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28. (CURRENTLY AMENDED) A method for improving performances of a mobile radiocommunication system using a power control algorithm, said method comprising:

regularly estimating if a criterion is met as to whether said power control algorithm should better be de-activated; and
de-activating said power control algorithm if said criterion is met,
wherein said de-activation includes performing a different type of algorithm than said power control algorithm, and
wherein said different type of algorithm includes an algorithm showing better performances than said algorithm in fast changing environments and/or high mobile speed.

29. (PREVIOUSLY PRESENTED) A method according to claim 28, comprising:

- regularly estimating if a criterion is met as to whether said power control algorithm should better be de-activated, when activated, or activated, when de-activated, - de-activating, or activating, said power control algorithm if the corresponding criterion is met.

30. (PREVIOUSLY PRESENTED) A method according to claim 28, wherein provision is made not to de-activate, or activate, said algorithm too frequently.

21 31. (PREVIOUSLY PRESENTED) A method according to claim 28, wherein said estimation as to whether said criterion is met is based on an estimation of a deviation value, representative of a deviation between an estimated transmission quality and a target transmission quality.

32. (PREVIOUSLY PRESENTED) A method for improving performances of a mobile radiocommunication system using a power control algorithm, said method comprising:

regularly estimating if a criterion is met as to whether said power control algorithm should better be de-activated; and

de-activating said power control algorithm if said criterion is met, wherein said de-activation includes performing a different type of algorithm than said power control algorithm,

wherein said algorithm and said other algorithm are chosen in a group comprising closed-loop power control algorithms and open-loop power control algorithms, and

wherein said estimation as to whether said criterion is met is based on an estimation of a deviation value, representative of a deviation between an estimated transmission quality and a target transmission quality, and

wherein said estimation as to whether said criterion is met includes:

- an estimation of a first deviation value, which would have been obtained if said power control algorithm had always been activated, on a given time-interval on which said deviation value is estimated,

- an estimation of a second deviation value, which would have been obtained if said power control algorithm had never been activated, on said given time-interval on which said deviation value is estimated,

- a choice between activation and de-activation of said algorithm depending on which of said first and second deviation values is the lowest.

33. (PREVIOUSLY PRESENTED) A method according to claim 31, wherein said estimated transmission quality is represented by an estimated signal-to-interference ratio.

34. (PREVIOUSLY PRESENTED) A method according to claim 31, wherein said estimated transmission quality is represented by a received signal power.

35. (PREVIOUSLY PRESENTED) A method for improving performances of a mobile radiocommunication system using a power control algorithm, said method comprising:

regularly estimating if a criterion is met as to whether said power control algorithm should better be de-activated; and

de-activating said power control algorithm if said criterion is met, wherein said de-activation includes performing a different type of algorithm than said power control algorithm,

wherein said algorithm and said other algorithm are chosen in a group comprising closed-loop power control algorithms and open-loop power control algorithms, and

wherein said estimation as to whether said criterion is met is based on an estimation of a deviation value, representative of a deviation between an estimated transmission quality and a target transmission quality, and

wherein said estimated deviation value is represented by the variance of said estimated transmission quality.

36. (PREVIOUSLY PRESENTED) A method according to claim 28, wherein said method is performed in the uplink transmission direction of said mobile radiocommunication system.

37. (PREVIOUSLY PRESENTED) A method according to claim 28, wherein said method is performed in the downlink transmission direction of said mobile radiocommunication system.

38. (PREVIOUSLY PRESENTED) A method according to claim 28, wherein said mobile radiocommunication system is of CDMA type.

27 39. (PREVIOUSLY PRESENTED) A mobile radiocommunication network entity, comprising, for performing a method according to claim 28, in the uplink transmission direction of a mobile radiocommunication system:

- means for performing said method,
- means for sending corresponding power control commands to a mobile station.

40. (PREVIOUSLY PRESENTED) A mobile station, comprising, for performing a method according claim 28, in the uplink transmission direction of a mobile radiocommunication system:

- means for receiving power control commands from a mobile radiocommunication network entity, according to said method.

41. (PREVIOUSLY PRESENTED) A mobile station, comprising, for performing a method according to claim 28, in the downlink transmission direction of a mobile radiocommunication system:

- means for performing said method,
- means for sending corresponding power control commands to a mobile radiocommunication network entity.

I/ 42. (PREVIOUSLY PRESENTED) A mobile radiocommunication network entity, comprising, for performing a method according to claim 28, in the downlink transmission direction of a mobile radiocommunication system:

- means for receiving power control commands from a mobile station, according to said method.

43. (PREVIOUSLY PRESENTED) A method according to claim 28, wherein said power control algorithm is one of a closed loop and open loop algorithm, and said different type of algorithm is the other of said closed loop or open loop algorithm.

44. (CANCELLED)


45. (CANCELLED)

46. (PREVIOUSLY PRESENTED) A method for improving performances of a mobile radiocommunication system using a power control algorithm, said method comprising:

regularly estimating whether a criterion is met as to whether said power control algorithm should better not be performed, and

not performing any power control algorithm in accordance with a result of said estimating step,

wherein said estimation as to whether said criterion is met is based on an estimation of a deviation value, representative of a deviation between an estimated transmission quality and a target transmission quality.



47. (PREVIOUSLY PRESENTED) A method according to claim 46, wherein said estimation as to whether said criterion is met includes:

- an estimation of a first deviation value, which would have been obtained if said power control algorithm had always been activated, on a given time-interval on which said deviation value is estimated,
- an estimation of a second deviation value, which would have been obtained if said power control algorithm had never been activated, on said given time-interval on which said deviation value is estimated,
- a choice between activation and de-activation of said algorithm depending on which of said first and second deviation values is the lowest.

48. (PREVIOUSLY PRESENTED) A method according to claim 46, wherein said
estimated transmission quality is represented by an estimated signal-to-interference ratio.

49. (PREVIOUSLY PRESENTED) A method according to claim 46, wherein said
estimated transmission quality is represented by a received signal power.

50. (PREVIOUSLY PRESENTED) A method according to claim 46, wherein said
estimated deviation value is represented by the variance of said estimated transmission
quality.

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58. (PREVIOUSLY PRESENTED) A method for improving performances of a mobile
radiocommunication system using a power control algorithm, said method comprising:

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regularly estimating if a criterion is met as to whether said power control
algorithm should better be de-activated; and

de-activating said power control algorithm if said criterion is met,
wherein said de-activation includes performing a different type of algorithm than said
power control algorithm,

wherein said algorithm is one of a closed loop power control algorithm and a open
loop power control algorithm and said other algorithm is the other of said closed loop
power control algorithm and said open loop power control algorithm.

59. (CANCELLED)
